

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte THOMAS MUNZMAY, WALTER MECKEL, ULRICH LIMAN,
HARTMUT NEFZGER, WERNER RASSHOFER, KARL-HEINZ DORNER
and ANDREAS RUCKES

Appeal No. 96-3862
Application No. 08/189,861¹

ON BRIEF

Before WEIFFENBACH, WALTZ and KRATZ, Administrative Patent Judges.

KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1-6. The rejection of claim 6 was withdrawn by the examiner and that claim was indicated as

¹ Application for patent filed February 1, 1994.

Appeal No. 96-3862
Application No. 08/189,861

allowable by the examiner in the answer mailed June 02, 1995. Accordingly, only claims 1-5 are before us for consideration. Claims 7-20, which are all of the other claims that remain pending in this application have been objected to by the examiner as depending on rejected claims (final rejection, pages 3 and 4).

BACKGROUND

The appellants' invention relates to a method for producing hydroxyfunctional compounds by reacting polyurethane and/or polyurethane polyurea waste with a low molecular weight diol or polyol. The amine-containing alcoholysis product obtained from that reaction, which is conducted at a first temperature, is thereafter further reacted either (a) at a lower second temperature with stirring; or (b) with a dialkyl carbonate and/or a 1,3-dicarbonyl compound. According to appellants, "None of the rejected claims will be argued separately" (brief, page 3). We construe this statement as meaning that the claims stand or fall together and thus we decide this appeal on the basis of independent claim 1 alone. See 37 CFR § 1.192(c)(7) (1995). An understanding of the

Appeal No. 96-3862
Application No. 08/189,861

invention can be derived from a reading of representative claim 1, which is reproduced below.

1. A process for the production of hydroxyfunctional compounds suitable for use in the polyisocyanate polyaddition process from polyurethane and/or polyurethane polyurea waste comprising:

I. reacting a polyurethane and/or polyurethane polyurea waste with a low molecular weight diol and/or polyol at a temperature of from about 160 to about 260°C and

II. further reacting the amine-containing alcoholysis product obtained in I. either

to (a) with stirring at a temperature of from about 50
was about 180°C but below the temperature at which I.
carried out

or

(b) with a dialkyl carbonate and/or 1,3-dicarbonyl compound.

The sole prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Braslaw et al. (Braslaw)	4,159,972	July
3, 1979		

Claims 1-5 stand rejected under 35 U.S.C. § 102 as anticipated by, or alternatively, under 35 U.S.C. § 103 as being unpatentable over Braslaw.

Appeal No. 96-3862
Application No. 08/189,861

We make reference to the examiner's answer(s) for the examiner's reasoning in support of the rejection, and to the appellants' brief(s) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we find ourselves in agreement with the examiner and will affirm this rejection for reasons which follow.

Braslaw discloses a recovery method for polyurethane scrap material including a first step of using low molecular weight aliphatic diols to thermally dissolve (decompose) the polyurethane material at temperatures up to 210°C (column 1). Additionally, Braslaw describes the method step of vacuum distilling the product of the first step at a temperature of about 130°C in a rotating film evaporator in the presence of added polyol (column 4). Braslaw discloses that the recovered

products are suitable for use in preparing new foams and teaches that the obtainment of a single layer liquid product indicates that "preferred reaction conditions are being employed" (column 3, lines 7-38).

Appellants urge that the claimed process is differentiated from the method of Braslaw in that neither of the alternatively claimed second lower temperature processing steps are taught by the applied patent (brief, page 3).

According to the examiner (answer, pages 3 and 4), Braslaw does teach the method defined by representative claim 1, including the second reaction step thereof. In the examiner's view, the method step required by the claimed alternative second reaction step of "stirring at a temperature of from about 50 to about 180°C but below the temperature at which 1. was carried out" is anticipated by Braslaw's "second" step. In this regard, the examiner applies Braslaw's step of passing a product from the higher temperature dissolution step through a rotating film evaporator maintained at 130°C as teaching appellants' claimed alternative second step (a) (answer, pages 4 and 6). Based on the present record, we find ourselves in agreement with the examiner.

We note that appellants apparently agree with the examiner's application of Braslaw to the claimed process including the first reaction step with the exception, according to appellants, that Braslaw does not disclose the alternative second claimed reactor step (a)². However, appellants have not convincingly pointed out how the claimed process, including the second lower temperature reaction step, patentably differs from the rotating film evaporation step of Braslaw that is being relied upon by the examiner.

We agree with the examiner's determination that some further reaction would have been reasonably expected to occur during the evaporation step of Braslaw. In this regard, Braslaw employs a temperature within the range claimed by appellants for the further reaction and discusses "preferred reaction conditions" (column 3, lines 37 and 38) as indicated above. Moreover, we note that claim 1 uses open "comprising" language so as not to exclude other materials, acts or steps, and claim 1 does not require any particular pressure, time,

² We again note that the examiner has withdrawn the rejection as to claim 6 which claim specifies the second step (b) alternative (answer, page 1).

and/or degree of reaction to differentiate over the method of Braslaw. We also agree with the examiner that the passage of the dissolution product mixture through the rotating film evaporator of Braslaw necessarily results in the stirring³ thereof. Thus, based on the present record, we are in agreement with the examiner's conclusion that Braslaw anticipates the claimed method. In this regard, appellants' claimed process including the second lower temperature stirring step conducted at 50-180°C has not been distinguished from the substantially same step employed in the rotating film evaporator of Braslaw. See In re Best, 562 F.2d 1252, 1255-56, 195 USPQ 430, 433-34 (CCPA 1977). We do not find appellants' argument regarding possible distinctions in what the claimed process may achieve in terms of reaction in conducting the lower temperature stirring step (brief, page 4) persuasive in light of the above.

³ The American College Dictionary, Random House, The L.W. Singer Company, Syracuse, NY, p. 1188 (1970) defines stir as "1. to move or agitate (a liquid, or any matter in separate particles or pieces) so as to change the relative position of component parts, as passing an implement continuously or repeatedly through: *to stir one's coffee with a spoon*. 2. to move, esp. in some slight way...." and defines stirring at page 1189 as "1. that stirs...."

Appeal No. 96-3862
Application No. 08/189,861

Moreover, we find that the examiner's alternative rejection of claims 1-5 under 35 U.S.C. § 103 as being unpatentable over Braslaw is sustainable. Braslaw discloses a process that includes substantially the same process steps as appellants' claimed process as indicated above. Thus, appellants' arguments regarding the obviousness/non-obviousness of adding additional reaction steps to the process of Braslaw (brief, page 5) are not convincing since the propriety of the rejection does not turn on adding additional reaction steps to Braslaw. Rather, the rejection is premised on the method step teachings already described by Braslaw including the lower temperature rotating film evaporation step as establishing the prima facie case of obviousness as indicated above. Accordingly, in addition to affirming the examiner's rejection of claims 1-5 as being anticipated by Braslaw under 35 U.S.C. § 102, we also agree with the examiner that appellants' claimed method would have been prima facie obvious under 35 U.S.C. § 103 over Braslaw's process. See In re Best, 562 F.2d at 1255, 195 USPQ at 433-434 (CCPA 1977). Accordingly, we also affirm the alternative § 103 rejection advanced by the examiner.

Appeal No. 96-3862
Application No. 08/189,861

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-5 under 35 U.S.C. § 102 and/or 35 U.S.C. § 103 is affirmed.

Appeal No. 96-3862
Application No. 08/189,861

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED

CAMERON WEIFFENBACH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
THOMAS A. WALTZ)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
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Appeal No. 96-3862
Application No. 08/189,861

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